CES EduPack

NEW
Materials Science and Engineering
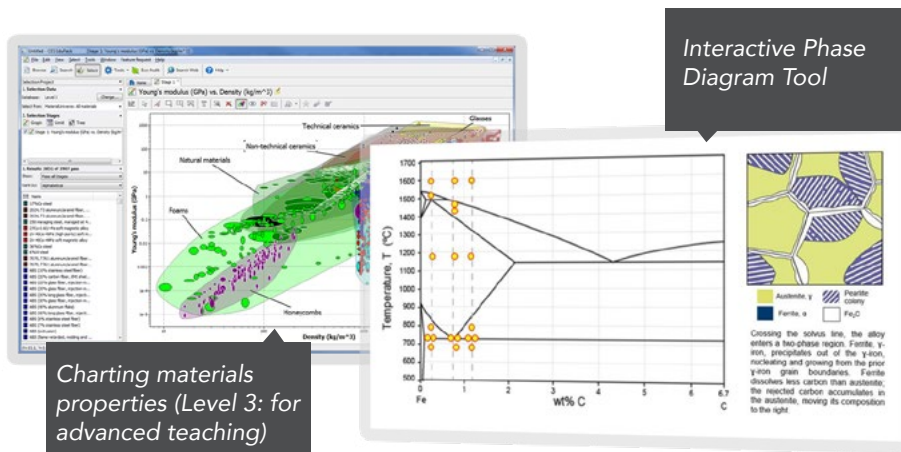
Mechanical Engineering

Bioengineering

Materials

"CES EduPack engages students and supports rigorous decisions among a large array of possible materials."

Professor Stephen H. Carr, Northwestern University, USA
Further comments & reviews at www.grantadesign.com/education/reviews

A unique teaching resource for materials

CES EduPack™ is the world-leading teaching resource for materials in engineering, science, processing, and design. Originating in the work of Professor Mike Ashby and colleagues at the University of Cambridge, EduPack has been extensively developed by Granta Design in collaboration with Professor Ashby and a growing community of educators at 1,000 universities and colleges around the world.

Interactive Phase Diagram Tool

Charting materials properties (Level 3: for advanced teaching)

What can you do with CES EduPack?

Engage students in the study of materials through interactive, highly visual software and resources that demonstrate why materials are important.

Support project work and **prepare students for industry** with comprehensive data, tools used by companies and advanced industrial case studies.

Encourage self-learning—students can install the software on their own computers and access learning resources such as glossaries and science notes.

Apply adaptable and ready-to-use teaching resources, enabling you to **enrich existing courses** and **design new courses**, supporting varied teaching approaches.

Develop student understanding of **interdisciplinary** topics such as sustainable development, with wide-ranging resources.

Forge **links** between courses in your curriculum with campus-wide licensing.

GRANTA **CES 2018 EDUPACK**

Key benefits:

- Inspire and engage students throughout the engineering curriculum

- Support existing teaching and new courses for any teaching approach

- Get reliable data quickly

- Promote inter-disciplinary learning and project work through all years of study across engineering, science, and design

What do you get?

- Software
- Information resources
- Teaching resources
- Student resources
- Support for textbooks
- Training and support

CES EduPack editions

What do you get with CES EduPack?

Information resources supporting all years of study

- Materials and Process Database—comprehensive information on technical, economic, and environmental properties. Three levels support curriculum-wide teaching, from Level 1 (basic properties, descriptive text, and application images for 69 materials) to Level 3 (detailed properties for >3,900 materials).

- Science notes—when browsing records, students can drill down to 'Science Notes': textbook-style explanations of the underlying material science.

- Enhanced Data—Specialist Editions add further databases. Topics include polymers, eco design, architecture, aerospace, low carbon power, energy storage systems, bio materials, and sustainable development. Links to web resources (e.g., ASM handbooks) support in-depth research.

Software to browse, search, select materials, and more…

CES EduPack software makes it quick and easy to explore this information, learning about the world of materials. Integrated graphing and selection tools help students to explore materials space. A structured methodology is embedded, enabling users to compare materials and processes and complete materials selection exercises. Additional tools include Eco Audit, introducing key concepts in eco design and lifecycle cost, Hybrid Synthesizer models, to explore the properties of composite materials, and Part Cost Estimation.

Support for leading textbooks

CES EduPack is used with leading textbooks across many subject areas and teaching approaches. EduPack information resources reference books by Ashby, Ashby & Jones, Callister, Budinski and Budinski, Askeland and Phulé, and Shackelford. Professor Ashby's books offer integrated exercises using EduPack.

Training, support, and licensing

Granta provides expert advice and technical support. Regular web seminars keep you up-to-date. Free quarterly case study sessions provide inspiration for your teaching. Or join us at a CES EduPack Short Course or the Materials Education Symposia—events are listed at www.grantadesign.com/education/.

A range of license options supports everything from individual courses to providing a campus-wide resource. Self-teaching and project work is enabled by licensing the software on students' own computers.

"CES EduPack enables non-engineering, visually-oriented students to get a 'feel' for material properties"

Dr Dick Groot, U. Pretoria, South Africa

GRANTA
Education Hub

Granta's Education Hub website contains over 350 resources created by Prof. Mike Ashby, Granta Design, and contributed by faculty using CES EduPack for materials teaching across engineering, design, and science. From here, educators can download CES EduPack and access training and inspiration.

- 80+ Powerpoint lectures in 4 languages
- Industrial case studies
- 30+ Exercises with solutions
- Teach yourself booklets
- White papers
- Getting started guides and video tutorials
- Materials and process selection charts

take a look here

www.teachingresources. grantadesign.com